

## WHAT IS CLAIMED IS:

1. A method of distinguishing between differentiated B cell lymphoma and undifferentiated myelocytic and/or lymphoblastoid leukemia, the method comprising monitoring heparanase expression in blood cells obtained from a patient and, based on a presence or an absence of said expression, distinguishing between said differentiated B cell lymphoma and said undifferentiated myelocytic and/or said lymphoblastoid leukemia.
2. A method of distinguishing between CLL and/or NHL and AML and/or ALL, the method comprising monitoring heparanase expression in blood cells obtained from a patient and, based on a presence or an absence of said expression, distinguishing between said CLL and/or NHL and said AML and/or ALL.
3. A method of determining whether a patient has CLL, the method comprising monitoring heparanase expression in blood cells obtained from a patient and, based on a presence or an absence of said expression, determining whether the patient has CLL.
4. A method of determining whether a patient has NHL, the method comprising monitoring heparanase expression in blood cells

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obtained from a patient and, based on a presence or an absence of said expression, determining whether the patient has NHL.

5. A method of determining whether a patient has AML, the method comprising monitoring heparanase expression in blood cells obtained from a patient and, based on a presence or an absence of said expression, determining whether the patient has AML.

6. A method of determining whether a patient has ALL, the method comprising monitoring heparanase expression in blood cells obtained from a patient and, based on a presence or an absence of said expression, determining whether the patient has ALL.

7. A method of distinguishing between early normal white blood cells and early leukemic cells, the method comprising monitoring heparanase expression in blood cells obtained from a patient and, based on a presence or an absence of said expression, distinguishing between said early normal white blood cells and said early leukemic cells.

8. A method of distinguishing between early lymphatic leukemic cells and late B leukemia and lymphoma cells, the method comprising monitoring heparanase expression in blood cells obtained from a patient

and, based on a presence or an absence of said expression, distinguishing between said early lymphatic leukemic cells and said late B leukemia and lymphoma cells.

9. A method of distinguishing between early lymphatic leukemic cells and late B leukemia cells, the method comprising monitoring heparanase expression in blood cells obtained from a patient and, based on a presence or an absence of said expression, distinguishing between said early lymphatic leukemic cells and said late B leukemia cells.

10. A method of distinguishing between early lymphatic leukemic cells and lymphoma cells, the method comprising monitoring heparanase expression in blood cells obtained from a patient and, based on a presence or an absence of said expression, distinguishing between said early lymphatic leukemic cells and said lymphoma cells.